

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	1	10/723722	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 17:21
L5	0	361/737	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 20:46
L6	771	(361/737).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/20 20:53
L7	948	(361/690).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/20 20:53
S2	17082	(pcmcia (personal adj computer adj memory adj card adj international adj association))	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:15
S3	2844312	cool\$3 heat\$3 thermal	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 17:56
S4	3030	S2 and S3	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 17:56
S5	589421	actuator airflow air\$1flow (air adj flow)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 17:57
S6	581	S4 and S5	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 17:57
S7	4641887	vent aperture opening opening via inlet intake outlet exhaust	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 17:58
S8	548	S6 and S7	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 17:59
S9	340951	(454/184-186).CCLS. or (("361") or ("165") or ("174") or ("312")).CLAS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/14 18:00
S10	125	S8 and S9	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:00
S11	0	("2005/0111185").URPN.	USPAT	OR	ON	2006/09/14 18:01
S12	1	(09/811863).APP.	USPAT; USOCR	OR	ON	2006/09/14 18:06

## EAST Search History

S13	8	("5566377"   "5901037"   "6148907"   "6154368"   "6219236"   "6259600"   "6333847"   "6341062").PN. OR ("6603658").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:09
S14	11	("4858070"   "4955131"   "5375037"   "5437041"   "5477426"   "5548483"   "5608607"   "5659459"   "5680294"   "5725622"   "5745041").PN. OR ("6781846").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:16
S15	20	("4502098"   "4785379"   "4853828"   "4953058"   "5521792"   "5815371").PN. OR ("6278609").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:26
S16	24	("5412534"   "5475563"   "5636103"   "5689654"   "5694294"   "5898568"   "5978219").PN. OR ("6104607").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:28
S17	17	("4126269"   "4751872"   "5171183").PN. OR ("5898568").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:28
S18	8	("4858070"   "4955131"   "5437041"   "5548483"   "5659459"   "5680294"   "5725622"   "5745041").PN. OR ("6031718").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:33
S19	20	("5412534"   "5475563"   "5636103"   "5689654"   "5694294").PN. OR ("5862037").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:35
S20	15	("5037313"   "5475563"   "5526229").PN. OR ("5808869").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/14 18:39
S21	52	expresscard	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 08:23
S22	2844312	cool\$3 heat\$3 thermal	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 08:06
S23	3	S21 and S22	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 08:06
S24	3	10/435146	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:40
S25	458479	piezoelectric piezo electromagnetic electro\$1magnetic	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:44

## EAST Search History

S26	17082	(pcmcia (personal adj computer adj memory adj card adj international adj association))	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:42
S27	3555	S25 and S26	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:43
S28	981	S27 and S22	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:43
S29	60027	(piezoelectric piezo electromagnetic electro\$1magnetic) with (fan actuator jet air airflow)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:12
S30	234	S29 and S26	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:45
S31	340951	(454/184-186).CCLS. or (("361") or ("165") or ("174") or ("312")).CLAS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/15 09:45
S32	20	S30 and S31	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:48
S33	836174	card cartridge module	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:48
S34	13960	S33 and S29	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 09:49
S35	469	S31 and S34	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:33
S36	28632	(pc ic pcmcia) adj (card carrridge module)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 06:37
S37	488	S36 and S29	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:06
S38	460	S37 not S35	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:06
S39	946	((pc ic pcmcia) adj (card carrridge module)) same (cool\$3 heat\$3 thermal)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:08
S40	501	((pc ic pcmcia) adj (card carrridge module)) with (cool\$3 heat\$3 thermal)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:10

## EAST Search History

S41	10	S40 and S29	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:14
S42	177	S40 and S31	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:10
S43	0	(piezoelectric or piezoelectrical) same cooling same pcmcia	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 10:15
S44	1	(piezoelectric or piezoelectrical) and cooling same pcmcia	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 10:16
S45	104	(piezoelectric or piezoelectrical) and cooling same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 10:23
S46	1	(09/960017).APP.	USPAT; USOCR	OR	ON	2006/09/15 10:20
S47	13	("4931904"   "5343940"   "5390734"   "5409055"   "5472043"   "5613906"   "5986887"   "6122169"   "6246582"   "6377459"   "6407916").PN. OR ("6538884"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/15 10:20
S48	905	(piezoelectric or piezoelectrical) and cooling same electronic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 10:24
S49	140	(portable adj computer) and (heat adj pipe) and fan and battery	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 10:34
S50	27917	(piezoelectric\$2 electromagnetic) with actuator	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 06:38

## EAST Search History

S51	4123	(piezoelectric\$2 electromagnetic) with actuator same (cool\$3 heat\$3 thermal)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 06:38
S52	9	(piezoelectric\$2 electromagnetic) with actuator same (cool\$3 heat\$3 thermal) same card	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 06:46
S53	128	(piezoelectric\$2 electromagnetic) with actuator same (cool\$3 heat\$3 thermal) same (card module cartridge)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 06:47
S54	2	(piezoelectric\$2 electromagnetic) with actuator same (cool\$3 heat\$3 thermal) same card	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 06:47
S55	19	(piezoelectric\$2 electromagnetic) with actuator same (cool\$3 heat\$3 thermal) same (card module cartridge)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 06:47
S56	6	jet adj4 actuator same (cool\$3 heat\$3 thermal) same (card cartridge modular)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:13
S57	80	("1485715"   "1878088"   "2498990"   "2591083"   "2761833"   "2812636"   "3058014"   "3262658"   "3361067"   "3425058"   "3985344"   "4131505"   "4171852"   "4180377"   "4206831"   "4261689"   "4363991"   "4369857"   "4465234"   "4473185"   "4495947"   "4516747"   "4533082"   "4533255"   "4548240"   "4568265"   "4611553"   "4635749"   "4646945"   "4667877"   "4693201"   "4697769"   "4702418"   "4747523"   "4798190"   "4802642"   "4930701"   "4957783"   "5034688"   "5040560"   "5102306"   "5119840"   "5121290"   "5199856"   "5203362"   "5238153"   "5346745"   "5365490"   "5395592"   "5402312"   "5411208"   "5424302"   "5582348"   "5621463"   "5681152"   "5742954"   "5758823"   "5791601").PN. OR ("6123145"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 06:53

## EAST Search History

S58	14	("20020175596"   "20020184907"   "20040253130"   "4780062"   "4834619"   "5381950"   "5861703"   "5862037"   "5914856"   "6123145"   "6252769"   "6430042"   "6588497"   "6848631").PN. OR ("7023697").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 06:55
S59	20	("5412534"   "5475563"   "5636103"   "5689654"   "5694294").PN. OR ("5862037").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:00
S60	1	jet adj4 actuator same (cool\$3 heat\$3 thermal) same (card cartridge modular)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 07:15
S61	762	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge) with (cool\$3 heat\$3 thermal)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:17
S62	1	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge) with (cool\$3 heat\$3 thermal) with actuator	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:17
S63	2	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge) with (cool\$3 heat\$3 thermal) same actuator	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:18
S64	17	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same actuator	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:19
S65	5	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same actuator	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 07:20
S66	10	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same actuat\$3	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 07:21

## EAST Search History

S67	41	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same actuat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:44
S68	77	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same actuat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:48
S69	36	S68 not S67	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 07:47
S70	12	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same actuat\$3	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 07:50
S71	1515	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 07:50
S72	40	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same (partition wall divider)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 08:09
S73	255	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same (partition wall divider)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 08:00
S74	11	("4858070"   "4955131"   "5375037"   "5437041"   "5477426"   "5548483"   "5608607"   "5659459"   "5680294"   "5725622"   "5745041").PN. OR ("6781846").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 08:03

## EAST Search History

S75	297	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same (housing enclosure)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 08:20
S76	13	("5208732"   "5414253"   "5590026"   "5596486"   "5625228"   "5854874").PN. OR ("6011690"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 08:14
S77	80	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card module cartridge) same (cool\$3 heat\$3 thermal air\$1flow airflow (air adj flow)) same (housing enclosure)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 08:58
S78	31	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with fan	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 20:45
S79	122	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with fan	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:11
S80	11	("4858070"   "4955131"   "5375037"   "5437041"   "5477426"   "5548483"   "5608607"   "5659459"   "5680294"   "5725622"   "5745041").PN. OR ("6781846"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:09
S81	8	("4858070"   "4955131"   "5437041"   "5548483"   "5659459"   "5680294"   "5725622"   "5745041").PN. OR ("6031718"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:10
S82	38	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with piezoelectric\$2	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:12
S83	99	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with piezoelectric\$2	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 09:15

## EAST Search History

S84	1495	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with electromagnetic	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:16
S85	6	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with electromagnetic with (air airflow fan)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:17
S86	6	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with electromagnetic with (cool\$3 air airflow fan)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:18
S87	11	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with electromagnetic same (cool\$3 air airflow fan)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:19
S88	5	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with electromagnetic same (cool\$3 air airflow fan)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 09:23
S89	0	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with jet adj4 actuat\$3 same (cool\$3 air airflow fan)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:20
S90	0	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) with jet adj4 actuat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:21
S91	0	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) same jet adj4 actuat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:21
S92	0	((pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 card) same (jet adj4 actuat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:22

## EAST Search History

S93	9	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) same (membrane oscillat\$3 vibrat\$3) same (cool\$3 air airflow fan)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 09:28
S94	22	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) same (membrane oscillat\$3 vibrat\$3) same (cool\$3 air airflow fan)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:26
S95	59	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) same (membrane oscillat\$3 vibrat\$3) same (thermal heat\$3 cool\$3 air airflow fan)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:27
S96	37	S95 not S94	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:27
S97	14	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic expansion expresscard) adj4 (card) same (membrane oscillat\$3 vibrat\$3) same (thermal heat\$3 cool\$3 air airflow fan)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 09:40
S98	5	S97 not S93	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 09:29
S99	1	2000-082890	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 09:41
S100	2	JP adj "2000082890"	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/20 09:43
S101	0	(G06F001/20).IPCR.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/20 09:43
S102	0	(G06F01/20).IPCR.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/20 09:44
S103	2262	(G06F1/20).IPCR.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/20 09:44

## EAST Search History

S10 4	40311	(pcmcia (personal adj computer adj memory adj card adj international adj association) pc ic) adj4 (card module cartridge)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 09:45
S10 5	216	S103 and S104	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 10:43
S10 6	3	"6538884"	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 10:47
S10 7	260	piezoelectric with fan	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 10:47
S10 8	77	piezoelectric adj fan	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/20 17:21
S10 9	0	(10/794129).APP.	USPAT; USOCR	OR	ON	2006/09/20 10:49